3d Squadron, 7th U.S. Cavalry Up Front:

by Major J.D. Keith

The campaign is over, the guns are quiet (for the most part), and the dreams of many cavalrymen in the 3d Squadron, 7th U.S. Cavalry have turned toward home. Thoughts of seeing loved ones and newborn children, hanging out at the beach, or having hot wings and beer at Hooters immediately come to mind.

Of course, it is never that easy. As the squadron continues to conduct stability operations and support operations in Baghdad and prepares for redeployment back to Fort Stewart, Georgia, it is the opportune time to capture more significant reflections on the squadron's operational and logistics experiences as it executed one of the fastest, longest, and most demanding campaigns in recent history.

With minimal war stories and hopefully some thought-provoking comments, this article presents a few of the lessons learned by the squadron during this latest conflict that other divisional cavalry squadrons can capitalize on as they prepare to conduct reconnaissance and security operations around the world.

Maneuver

Hunter-killer teams. Much has been written about the merits (or demerits) of scouts and tankers being organized into hunter-killer teams. Our two cents — it works. Our ground cavalry troops (GCTs) trained hunter-killer teams and tactics at Fort Stewart, the National Training Center (NTC), and in Kuwait, then exercised them in the ultimate test — combat. The typical team consisted of three cavalry fighting vehicles (CFVs) and two tanks. As troop commanders made contact with enemy forces, they were rapidly able to bring overwhelming fires to bear within seconds of the initial contact versus trying to maneuver a tank platoon to the point of contact or to outflank the enemy. This gave the scout (platoon leader or platoon sergeant) the ability to rapidly kill the enemy he encountered with his CFV or tank fires, instead of becoming truly "decisively engaged" and losing the ability to maneuver and continue his mission. When in more static, squadron guard operations, due to the nature of the threat, we continued to work in hunter-killer teams with great effectiveness with each outpost having the firepower and flexibility to deal with any of the situations they encountered when defending against attacking Iraqi forces. Hunter-killer teams work — be flexible and train them during peacetime.

Heavy operations in coordination with OH-58D Kiowa Warriors (KWs). We doctrinally employed our air cavalry troops (ACTs) and it worked great! The KW performed superbly throughout the campaign. They do not fly straight on a heading at the

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same altitude, or hover in one area long enough to be engaged. On a number of occasions, the KWs took ground fire and received damage, but it was mostly cosmetic. The troop tactics, techniques and procedures (TTPs) that we trained and exercised at home station, the Joint Readiness Training Center, the NTC, and during train-up in Kuwait, enabled the crews to execute their missions and survive.

The squadron must be resourced to operate two forward arming and refueling points (FARPs) in addition to providing cold gas in the squadron support area (SSA) to fully support offensive operations. Through extraordinary means, we were able to do this and it paid great dividends as our FARPs maneuvered across the battlefield to be in position to "go hot" as required to support continuous air operations. Finally, higher headquarters need to understand and be more cognizant of how cavalry units employ their organic aviation assets in cross forward line of own troops (FLOT) operations to allow them to operate freely within their capabilities based on the commander's recommendation to accomplish specific missions.

OH-58D Kiowa Warrior operations in built-up areas. During the campaign, our ACTs conducted numerous operations in built-up areas, encountering heavy small-arms fire on several occasions. Several of the aircraft received damage; but none were lost to enemy fire. To mitigate risk while still accomplishing the mission at the squadron level, we actually evaluated the need for KW support for each of these types of missions. If KWs must be used around contested urban terrain, we recommend that they be used during hours of limited visibility, thereby greatly increasing the aircraft's survivability.

Intelligence

During combat, the divisional cavalry squadron typically operates under the direct control of the commanding general and his assistant division commander for maneuver. When employed doctrinally, the squadron area of operations (AO) greatly exceeds that of a normal brigade combat team (BCT) — often more if working across the division front — therefore, it is logical to assume that the squadron should be equipped similar to a BCT because it needs an analysis control team. Without this asset, the squadron gathers intelligence, but is severely hamstrung in receiving intelligence since it does not have robustness in the S2 shop or digital links for the analysis control team to tap so they can send information laterally, or receive information and analysis from higher. Adding an analysis control team will greatly assist the commander and his staff as they develop the intelligence picture

of the battlefield. Not only will this help discover and develop the situation in the squadron AO during operations, but will help gain a clearer picture of the proposed AO during the planning process. Currently, the squadron must either go back to division (often physically) and piggyback on a nearby BCT to gather necessary planning information, or fight the good fight with division to have an analysis control team from a BCT assigned.

Fires

The howitzer battery and squadron mortars. A howitzer battery is an integral part of a regimental cavalry squadron's modification table of organization and equipment (MTOE) for a reason, and it needs to be added to the division cavalry's MTOE.

Responsive, large caliber cannon fires are a must for successful cavalry operations. The division's answer to this shortcoming was to attach a six-gun Paladin battery to the squadron and — to put it simple — we maneuvered like a mortar platoon on steroids. Over the course of the campaign, our howitzer battery fired over 600 rounds of 155mm high-explosive (HE) rounds, dual-purpose improved conventional munitions (DPICM), and search and destroy armor (SADARM), and definitely contributed to the squadron's success in every engagement against Iraqi forces. If the howitzer battery cannot be added to the squadron MTOE, then the division should create a habitual relationship between an existing howitzer battery within division artillery, and with the squadron in garrison, field training, and combat. This will require the howitzer battery to attend the squadron's training meetings, field problems, and other exercises so that it becomes completely integrated into the squadron. Since the squadron has only six M1064 120mm mortars organic to the unit (two per GCT by MTOE), we chose to form them into a six-gun mortar platoon in garrison to maximize training and provide limited massed indirect fires to the main effort to facilitate maneuver. To do this, we also added a fire direction center (FDC) M577 and an M998, and crewed both vehicles out of hide. During Operation Iraqi Freedom and based on our mission analysis, we decided to break the platoon back down into two three-gun sections and attach them to two of the GCTs. We found this technique highly beneficial not only to MOS-specific training, but it added increased fire support flexibility to the squadron since the mortars could operate as a six-gun platoon or break down into three- or even two-gun sections, depending on the mission. This also allowed us to use the mortarmen in a dismount mode during stability operations and support operations since they were already a trained platoon with an established chain of command. Any fire support the squadron can get is good — do not change the MTOE reference mortars unless it is to assign them as a platoon under headquarters and headquarters troop. The howitzer battery will be a great combat multiplier as it allows the squadron to truly "DESTROY" enemy forces with indirect fires (SADARM and DPICM) and to help shape the squadron's fight.

Enlisted tactical air controller (ETAC) integration and resourcing. The U.S. Air Force's ETAC is the true battlefield hero. In today's joint fighting environment, the ability of the ETAC to unleash hell on an enemy force is unchallenged. The divisional cavalry squadron should be resourced with three ETAC teams, each in an armored vehicle (increase the current MTOE from one to three M113A3s). Distribution is one per GCT. Proper employment of the ETAC is a true combat multiplier, whose use in combat saves countless friendly lives. Also, the employment of close air support via the ETAC needs to be aggressively trained in garrison. Leaders from troop to squadron level need to fully understand the capabilities that the ETAC brings to the battlefield and the constraints under which it operates.

Mobility/Countermobility/Survivability

Adding a combat engineer company to the squadron is always a battlefield multiplier. In the case of Operation Iraqi Freedom, our attached engineer company's performance was absolutely superb. Without using mines and with limited class IV barrier materiel, they quickly constructed temporary countermobility obstacles by moving wreckage around the battlefield or emplacing berms along high-speed avenues of approach to hinder enemy movement. They also provided quality bridge and route assessments along our lines of communication, allowing the scouts to focus on gaining information and maintaining enemy contact. Finally, the engineers proved very effective in their secondary role as infantrymen, manning key dismount avenues of approach and fighting from open-hatched M113s to keep enemy dismounted infantry and paramilitary forces away from the M3s and M1s, especially in urban terrain.

Adding an engineer company to the squadron cannot be underestimated, their input and assistance in terrain analysis during mission analysis and execution was vital. The squadron does need support from higher, and conducts its mission analysis to determine which engineer vehicles are required to support combat operations — it may be more effective to leave armored vehicle launch bridges (AVLBs) or armored combat equipment (ACE) behind in a consolidated unit package due to maintenance and speed, especially during offensive operations.

Replace the squadron's M998 HMMWVs with M1114s (M1025/26 at the least). The squadron's recent experience fighting an asymmetrical threat, in addition to our experiences at the NTC, simply reinforce the need to replace the vast majority of the squadron's M998s with up-armored HMMWVs capable of mounting crew served weap-

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ons. This change not only increases protection to the vehicle's occupants but also allows the squadron to provide security to its own high value assets, especially when on the move. During Operation Iraqi Freedom, the squadron used a direct support linebacker platoon to provide security to the FARPs and the squadron support area (SSA). If left to only organic assets (as done during NTC rotations), the squadron was forced to take a scout platoon from one of the GCTs to provide this vital security support. Authorizing M1114s in place of M998s allows the squadron to provide greatly increased security to rear area elements in the event of contact with enemy forces, and also allows a greater distribution of mobile crew served weapons with night vision devices.

Air Defense

The squadron used a linebacker platoon as direct support throughout most of the campaign. During one portion, we had a battery. Based on threat analysis, we chose to use the air defenders in a ground support mode, marrying them up with our two FARPS. We used the combat trains to provide much needed mechanized combat power to these high value assets, without which we could not accomplish mission. This also enabled us to keep combat power forward with the GCTs instead of pulling reconnaissance forces from them to protect our combat service support assets. When operating with a battery, adding the battery commander and his M2A2 to the tactical operations center (TOC) greatly enhanced the TOC's defenses because the tactical actions center was not collocated. The linebacker-equipped air defenders performed superbly in ground support and are a definite value added to the squadron during any and all operations.

Logistics

Forward area support company (FASCO)/forward area support team (FAST). One major problem during division cavalry operations is logistics support. There is very little, if any, written doctrinal guidelines, and there is no dedicated logistics support element, such as a brigade's forward support battalion (FSB), to support a squadron the size of a mini-brigade. While the squadron operates under the aviation brigade in garrison and receives aviation intermediate maintenance (AVIM) support from the aviation support battalion (ASB), the ASB is not equipped in any way, shape, or form, to support the squadron's substantial ground combat and support fleet. On the other hand, while the division's main support battalion (MSB) has the capability to support the squadron's ground components, it does not have the AVIM.

Another significant support obstacle is that the squadron almost always works directly for the division commander as a separate maneuver element, typically well forward in the division's battlespace, significantly increasing the distances it must travel to get logistics support — far beyond what a maneuver brigade must travel to get support from its habitual FSB. The squadron, in conjunction with the division, fought to rectify this logistics situation while still deployed to Bosnia as Stabilization Forces (SFOR) 9.

While preparing for NTC rotation 02-07, the division created a FAST out-of-hide from elements of the MSB and ASB. The team had an organic maintenance support team equipped with one M88A1, one M978 wrecker, direct support electrical test set (DSETS), GRM-122 (single-channel ground and airborne radio subsystem [SINGARS] radio test set), and assorted other maintenance vehicles. An additional support package with eight 5,000-gallon fuel tankers, two reverse osmosis water purification systems, two front-line ambulances, two palletized load systems, one forklift, three heavy-equipment transports, three 5-ton cargo trucks, and command and control vehicles were assembled to provide the remainder of support. We tested the concept during NTC 02-07 when the squadron deployed and operated under the control of the 52d Mechanized Division, which was the first de-

ployment of the entire squadron since Operations Desert Shield/Storm.

During redeployment, the FAST, as a separate, distinct unit, was unfortunately allowed to slip into obscurity. On receiving notification to prepare to deploy in support of Operation Enduring Freedom, the FAST (or FASCO as we viewed it) again received increased emphasis from the squadron. The FASCO was formed and supported the squadron throughout the deployment, reception, staging, onward movement, and integration (RSOI), combat operations, and redeployment. A senior first lieutenant commanded the FASCO and a master sergeant served as the noncommissioned office in charge.

From January through the end of April, the FASCO supplied the squadron with over 320,000 gallons of JP8; 345,000 meals ready to eat; 230,000 gallons of bottled water; 175,000 gallons of bulk water; 80,000 short tons of ammunition; repair parts in excess of $14 million; 115,000 gallons of packaged petroleum products; and completed 305 direct support job orders. It remains an essential part of the squadron's ability to conduct operations successfully. We emphatically recommend the following:

- Establishing FASCO as an MTOE-authorized unit under the MSB. This requires transferring personnel and equipment from the MSB to the new MTOE unit, and transferring limited personnel and equipment from the ASB to the new FASCO.
- The FASCO provides direct support to the squadron 100 percent of the time, in garrison, training, and combat.
- The relationship between the FASCO and the squadron is the same as that of a direct support artillery battalion to its habitual brigade combat team.
- A major, either ordnance or quartermaster, should command the FASCO. The position should be a branch qualifying position and considered the equivalent of a support operations officer.
- The FASCO commander's rater will be the squadron commander, his intermediate rater should be the MSB commander, and the senior rater will be the division support command commander.

Permanently establishing the squadron FASCO is absolutely essential to successful squadron operations in support of the division. We tested this theory at the NTC, validated it in combat during an attack that stretched over 700km, and then continued to support the squadron during stability operations, support operations, and redeployment. Bouncing the squadron's support from one FSB to another, or relying on the MSB, does not work. Institute the FASCO now — this is an absolute must!

Squadron maintenance operations. Establish the squadron maintenance platoon just like an armor or mechanized battalion MTOE unit. Although many future (and maybe a couple of past) GCT commanders will grind their teeth, the full-time consolidation of the GCT maintenance teams on MTOE will greatly facilitate maintenance operations in garrison and field/combat operations. This will help the squadron maintenance sergeant ensure that all the squadron's mechanics receive the training they need to fully support their unit's wartime needs (it isn't just about turning wrenches).

The current divisional cavalry squadron MTOE gives the squadron five M88A1 recovery vehicles, one fewer than an armor/mechanized battalion, yet we have 68 combat vehicles (41 M3s and 27 M1s) organic to the squadron, versus 44 in the armor/

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mechanized battalion. This equates to 35 percent more combat vehicles. Add the doctrinal time and space distances that the squadron operates over that of an armor/mechanized battalion and this shortcoming of recovery assets speaks for itself. In addition, the squadron typically does not have an FSB to fall back on for additional recovery support. Division cavalry squadrons need to be authorized at least two more M88A1s to facilitate squadron operations. Finally, we need to put to bed the old "built-up prescribed load list (PLL) and tool truck versus deployability" issue. Change the squadron's MTOE to replace all troop PLL and tool trucks with M1079 vans. They are practically ready-made PLL/tool trucks that can be quickly reconfigured internally to provide a clean, organized, and safe environment for work and storing PLL/tools. They also come with built-in electrical wiring that enables use of the unit-level logistics system computer inside the truck.

Command and Control

The tactical actions center (TAC). When formed, the squadron TAC should have three Bradley-series vehicles (M3/BFIST). Currently it has two — the commander's and the S3's. The squadron fire support officer (FSO) should be equipped with a BFIST; he currently has his M577 in the TOC and an M998 HMMWV. If the FSO is given a BFIST, we then recommend putting the ETAC with his communications package in the back of the BFIST — this may be a little crowded, but worth investigating. Given the distances covered by the squadron, this will allow for fires deconfliction as far forward as possible, especially when distances prevent the advanced field artillery targeting and direction system from operating and everything is executed over frequency-modulated (FM) or tactical satellite radios. If the ETAC needs to see outside the vehicle, he can always open the hatch of the BFIST. Keep the ETAC HMMWV if possible — just as a backup.

Communications. The division cavalry squadron needs a more robust long distance communications package. The MTOE should be changed to replace the current M998 retransmission (RETRANS) vehicle with armored vehicles, such as an M1114 or M113A3, to provide increased protection and firepower to an element that typically is required to operate alone on the battlefield. The squadron had the opportunity to draw additional M113s during the operation and did exactly that — with great results. When not used for RETRANS, the M113s (with .50-cal machine guns) provided outstanding security support to the squadron TOC and combat trains (both elements without much firepower). When employed as RETRANS, having two like vehicles (M113/M1114) with the capability to traverse challenging terrain, and outfitted with .50-cal machine guns or MK-19s, the RETRANS team can provide its own security when none is available. If the squadron S6 is similarly equipped with an armored vehicle, he can perform emergency RETRANS and provide additional security to the squadron TOC.

The squadron also had the unique opportunity to use the Force XXI battle command brigade and below (FBCB2) — blue force tracker in combat. The system we used was satellite based instead of enhanced positioning location and reporting system (EPLRS) based. Although we did not have any experience with the EPLRS-based system, the satellite generally worked great. The ability to maintain situational awareness and send free text messages was vital to the squadron's overall success, especially when we were forced to operate beyond FM communications range within the squadron. FBCB2 should be more evenly distributed across the squadron than ours were during Operation Iraqi Freedom — we had only five systems in the squadron, providing zero redundancy. Troop commanders, the squadron commander, and the squadron XO at the TOC were the only recipients of this outstanding system. Although every vehicle does not need FBCB2, we do recommend the following based on the cavalry squadron's doctrinal missions and our experiences with the system:

- 11 per GCT — two scout platoon, two tank platoon, one troop commander, one troop XO, and one troop command post.
- One per ACT — mounted in troop commander's HMMWV.
- Two per aviation unit maintenance troop — mounted in HMMWV (FARP command and control vehicle).
- Five per squadron TAC/TOC — squadron commander/S3 M3, S3 577, S2 577, and FSO 577.
- Two per squadron combat trains command post — S4 577 and HMMWV.
- Six in headquarters and headquarters troop (HHT) — squadron maintenance officer, senior maintenance sergeant, support platoon leader, HHT commander, HHT first sergeant, and HHT maintenance sergeant.

This arrangement brings the grand total to 50 systems across the entire squadron. This not only increases overall friendly situational awareness and the ability to navigate the battlefield, but provides a secondary or tertiary means to disseminate graphics, fragmentary orders, and important reports across the width and breadth of the unit.

Finally, MTOE does not adequately equip the squadron with UHF/VHF communications. Reliable UHF/VHF communications within the ground elements of the squadron could have greatly increased the squadron's ability to fully use the KWs' communications systems. This would have allowed the squadron commander, TOC, and GCT commanders to maintain redundant communications with the KWs and take greater advantage of their ability to maneuver freely across the squadron's battlespace. Putting this capability into the FARP command and control vehicles will also allow the pilots a more reliable and capable means of communicating with FARP NCOICs, which is vital when maintaining KW coverage on the battlefield. To accomplish this, we recommend that the MTOE be changed to authorize 16 AN/VRC-103 multi-channel radio systems that operate in UHF/VHF and FM frequencies.

Hopefully these comments and recommendations will find support across the armor/cavalry community and work their way into unit MTOEs and standard operating procedures.

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